

M Series Filter Housings



Facet filter housings are specifically designed to remove solid particles such as rust, dirt, pipe scale, sand and metal from fuel. They are commonly located ahead of clay treaters and coalescer separators to protect and prolong cartridge life. A single pass through the filter allows clean product to flow downstream.

Facet filter housings will continuously remove solids from fuel when used with Facet standard single, double or triple-length FA, M OR CIF Series high efficiency filter cartridges. Housings are designed for easy servicing and low maintenance. All are built to ASME Code, Section VIII, with many standard and optional accessories and connections available to facilitate individual installation requirements. Facet filters provide a complete system to meet industry standards and levels of effluent purity required by commercial airlines, major oil companies and governments, worldwide.

M Series filter housings use any of Facet's high efficiency filter cartridges. A single pass of product through the system removes solids such as rust, dirt, scale, granules and other particles commonly found in liquid process streams.

M Series filter housings are available in three styles and in several standard sizes to accommodate specific flow and filtration requirements. They are designed with no internal moving parts to provide easy service and reduced maintenance costs. Each housing is manufactured using quality materials and workmanship to give long-lasting, dependable service.

M Series filter housings can be fitted with either multiple single-length cartridges, stacked 1, 2 or 3 high or their double-length or triple-length equivalents.

Standard Housing Design

- EI 1596 Design & Construction
- Body: Welded carbon steel construction other materials available on request
- ASME Code, Section VIII construction, stamped and certified
- Designed for 150 psi @ 250°F—higher pressure and temperature ratings available on request
- Head closures: Style A —thru-bolt; Styles B and C —swing bolt
- Buna-N closure gasket —other materials available on request
- Rod mount cartridge hardware
- Knife edge cartridge mounting seals
- Headlift furnished on 20" (508 mm) and larger
- Inlet and outlet permanently marked
- Exterior: Prime coated
- Interior: Epoxy coated (EI 1541)

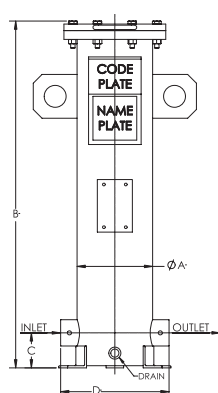
Standard Connections

- Inlet and outlet: Style A —3000# NPT; Style B and C —150# RF (ANSI) flanged
- Side and bottom drain: 3000# NPT
- Vent and relief valve: ¾" 3000# NPT
- Pressure gauge: ¼" 3000# NPT

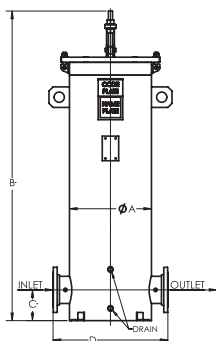
Options

- Automatic air eliminator
- Automatic air eliminator check valve
- Differential pressure gauge
- Pressure relief valve
- Manual drain valve

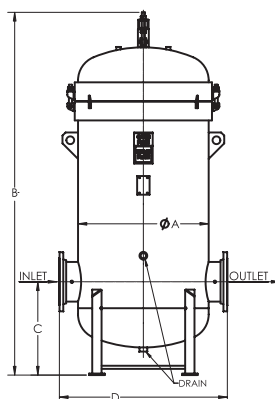
M Series Filter Housings



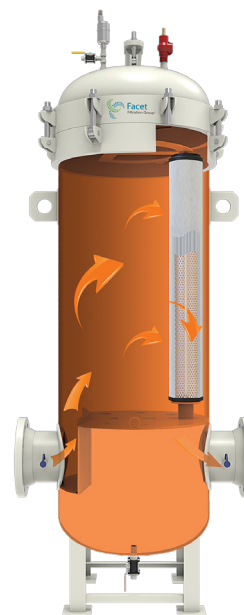
STYLE A



STYLE B



STYLE C



DATA

MODEL NUMBER	MAXIMUM FLOW RATE		CONNECTIONS						ANCHOR BOLT PLAN					WEIGHT WITH CARTRIDGES	
			INLET/OUTLET		SIDE DRAIN		BOTTOM DRAIN		BOLT HOLE DIAMETER		BOLT CIRCLE		NO. OF BOLT HOLES		
	gpm	lpm	in	mm	in	mm	in	mm	mm	in	mm	in			
1M-114	66	250	2	51	N/A	N/A	¾	19	⅞	22	11⅝	295	3	110	50
1M-214	133	503	2	51	N/A	N/A	¾	19	⅞	22	11⅝	295	3	140	64
1M-314	200	757	2	51	N/A	N/A	¾	19	⅞	22	11⅝	295	3	160	73
2M-314	400	1514	4	102	¾	19	¾	19	⅞	22	17	432	4	450	204
3M-314	600	2271	4	102	¾	19	¾	19	⅞	22	19	483	4	525	238
4M-314	800	3028	6	152	¾	19	¾	19	⅞	22	21	533	4	650	295
6M-314	1200	4542	6	152	¾	19	¾	19	⅞	22	23	584	4	775	352
11M-314	2200	8328	8	203	1½	38	1	25	⅞	22	24⅝	625	4	1225	556
18M-314	3600	13627	10	254	1½	38	1	25	⅞	22	31⅜	797	4	1950	885
27M-314	5400	20441	12	305	1½	38	1½	38	1	25	39⅜	1000	4	2700	1225

Other sizes available on request.

DIMENSIONS

MODEL NUMBER	DIMENSIONS								HOUSING LIQUID VOLUME		HOUSING TYPE
	A		B		C		D				
	in	mm	in	mm	in	mm	in	mm	gal	ltr	
1M-114	8 ⁵ / ₈	219	24 ¹ / ₄	616	4	102	12 ³ / ₈	314	5	19	Style A - Flat
1M-214	8 ⁵ / ₈	219	39 ¹ / ₂	1003	4	102	12 ³ / ₈	314	9	34	Style A - Flat
1M-314	8 ⁵ / ₈	219	54 ¹ / ₂	1378	4	102	12 ³ / ₈	314	12	45	Style A - Flat
2M-314	14	355	72 ³ / ₄	1848	6	152	22	559	36	136	Style B - Flat
3M-314	16	406	72 ³ / ₄	1848	6	152	24	610	48	182	Style B - Flat
4M-314	18	457	75 ¹ / ₄	1911	7 ¹ / ₂	191	26	660	63	238	Style B - Flat
6M-314	20	508	75 ¹ / ₂	1918	7 ¹ / ₂	191	28	711	78	295	Style B - Flat
11M-314	28	711	103 ¹ / ₄	2623	24	610	36	914	205	776	Style C - Dished
18M-314	34	864	109 ¹ / ₂	2781	27	686	46	1168	315	1192	Style C - Dished
27M-314	42	1067	116 ³ / ₄	2965	30	762	54	1371	520	1968	Style C - Dished

NOTES:

- Cartridges are selected separately to fit specific application requirements.
- Multiple stack cartridges can be replaced with one single-length equivalent. For example: 1M-214 = 1M-128 or 6M-314 = 6M-143, etc.
- Consult factory for flow rates when using EI 1590 Qualified Elements.

All dimensions, weights and volumes are approximate and are for estimating purposes only.

M Series High Efficiency Pleated Paper Filter Cartridges



Facet M Series high efficiency pleated paper filter cartridges are designed to effectively remove solid contaminants such as rust, dirt, scale, granular and other types of solids. These cartridges are constructed to meet the demanding requirements of the marine filter market.

Media with high efficiencies throughout the life of the cartridges are available in ratings of 0.5 to 75 microns. The filtration of potable liquids is not recommended with this series of filter cartridges.

Facet also offers a MPM Series multimedia, pleated extended area, depth filter cartridge for removing colloidal, slimy, or sludge type solids, as well as extremely fine solids, from process streams. They are available in 0.5, 1, and 2 micron ratings. The combination of multimedia pleated paper fiberglass sheets provides a unique depth filter with a large surface area.

Our pleated paper filter media is made from a variety of natural and synthetic fibers. The fibers are bonded using various resins to provide excellent filtration and solids holding characteristics.

Benefits

- Higher efficiency and longer service life = lower operating costs
- High efficiency cartridge provides superior solids holding capacity
- New spirally wound core reduces cartridge weight resulting in lower freight costs
- All metal components are epoxy powder coated to protect against corrosion
- Gaskets are Buna-N -other materials available upon request
- Available in both self-centering rod mount and screw base
- Available in numerous micron ratings: 0.5, 1, 2, 5, 10, 15, 25, 40, and 75
- Flow direction: Outside to In
- Design collapse pressure: 75 psid (5.25 kg/cm²)
- Initial differential pressure: 2 psi (014 kg/cm²) or less

Applications

- Fuels
- Rolling Oils
- Insulating Oils
- Paints
- Liquid Plastics
- Waxes
- Lube Oils
- Coolants
- Industrial Water
- Varnishes
- Base Oils
- Solvents (Stoddard Based)
- Petroleum Based and Synthetic Hydraulic Fluids

M Series

High Efficiency Pleated Paper

Filter Cartridges

PERFORMANCE SPECIFICATION

SERIES	NOMINAL REMOVAL MICRON								
	0.5	1	2	5	10	15	25	40	75
MPM	•	•	•						
MP	•	•	•	•	•	•	•	•	•

MATERIALS

Filter media options:

0.5 - 2 µm: Multimedia Pleated paper & Fiberglass

5 - 75 µm: Resin Impregnated Pleated Paper

Gasket Materials:

Standard: Buna-N

Optional: Other materials available upon request

Components:

Center Core: Epoxy Powder Coated Spiral Wound Steel

End caps: Epoxy Powder Coated Steel

Outer Body: Perforated Oil Board

Adhesives: Thermoset PVC

FILTER SIZES AND DIMENSIONS

SERIES	DIMENSIONS					
	OD		ID		LENGTH	
	in	mm	in	mm	in	mm
MPMµL	6	152	3 ½	89	14 ½	370
MPµ	6	152	3 ½	89	14 ½	370
MPµL	6	152	3 ½	89	14 ½	370
MPMµLX2	6	152	3 ½	89	28 ¾	730
MPµX2	6	152	3 ½	89	28 ¾	730
MPµLX2	6	152	3 ½	89	28 ¾	730
MPMµLX3	6	152	3 ½	89	43 ¼	1090
MPµX3	6	152	3 ½	89	43 ¼	1090
MPµLX3	6	152	3 ½	89	43 ¼	1090
MPMµLX4	6	152	3 ½	89	57 ¾	1465

µ = Micron Rating

Note: The dimensions are nominal. These are standard sizes. Many other sizes and combinations are available. Please call us for special sizes.

TEMPERATURE / COMPATIBILITY GUIDE

MEDIA	MAXIMUM TEMPERATURE	pH RANGE	PETROLEUM PRODUCTS	CHEMICALS	AQUEOUS SOLUTIONS
Multimedia	240 °F	5 - 9	Excellent	Good	Fair
Pleated Paper	240 °F	5 - 9	Excellent	Good	Fair

CARTRIDGE ORDERING INFORMATION

SERIES	MICRON RATING	OUTER BODY DESCRIPTION	LENGTH	SPECIAL FEATURES
MPM	0.5	L	X2	
MP	5		X3	SB
	0.5, 1, 2, 5, 10, 15, 25, 40, 75	L = Outer Body No designation = No outer body	No designation = 14 ½" X2 = 28 ¾" X3 = 43 ¼" X4 = 57 ¾"	SB = Screw Base V = Viton Gasket J = Non Asbestos Gasket N = Neoprene Gasket

M Series High Efficiency Pleated Paper Filter Cartridges

MP SERIES

SINGLE-LENGTH (14 ½") CARTRIDGE FLOW RATES AND EFFECTIVE FILTRATION SURFACE AREA

Micron		0.5		1		2		5		10		15		25		40		75	
Viscosity		Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP	Flow	ΔP
ssu	cs	gpm	psi	gpm	psi	gpm	psi	gpm	psi	gpm	psi	gpm	psi	gpm	psi	gpm	psi	gpm	psi
29	1	66	.50	66	.28	66	.28	66	.13	66	.08	66	.04	66	.03	66	.02	66	.01
32	2	66	1.0	66	.57	66	.57	66	.26	66	.18	66	.09	66	.06	66	.04	66	.02
36	3	66	1.5	66	.86	66	.86	66	.40	66	.27	66	.14	66	.09	66	.07	66	.04
43	5	52	2.0	66	1.4	66	1.4	66	.66	66	.45	66	.23	66	.15	66	.11	66	.07
52	8	32	2.0	57	2.0	57	2.0	66	1.1	66	.73	66	.37	66	.23	66	.18	66	.11
58	10	26	2.0	46	2.0	46	2.0	66	1.3	66	.89	66	.47	66	.29	66	.22	66	.13
98	20	13	2.0	23	2.0	23	2.0	50	2.0	58	1.4	66	.93	66	.58	66	.44	66	.26
140	30	8	2.0	15	2.0	15	2.0	33	2.0	50	1.7	66	1.4	66	.87	66	.66	66	.40
190	40	6	2.0	11	2.0	11	2.0	25	2.0	45	2.0	66	1.9	66	1.2	66	.88	66	.53
230	50	5	2.0	9	2.0	9	2.0	20	2.0	38	2.0	56	2.0	66	1.4	66	1.1	66	.66
342	75	3	2.0	6	2.0	6	2.0	13	2.0	25	2.0	38	2.0	60	2.0	66	1.6	66	1.0
455	100	2	2.0	4	2.0	4	2.0	10	2.0	17	2.0	28	2.0	45	2.0	60	2.0	66	1.3
910	200	1	2.0	2	2.0	2	2.0	5	2.0	8	2.0	14	2.0	22	2.0	30	2.0	50	2.0
1365	300	0.9	2.0	1	2.0	1	2.0	3	2.0	6	2.0	9	2.0	15	2.0	20	2.0	33	2.0
1818	400	0.6	2.0	1	2.0	1	2.0	2	2.0	4	2.0	7	2.0	11	2.0	15	2.0	25	2.0
2273	500	0.5	2.0	0.9	2.0	0.9	2.0	2	2.0	3	2.0	5	2.0	9	2.0	12	2.0	20	2.0
Surface Area Square feet		8.6		20.2		23.1		23.1		23.1		23.1		23.1		23.1		23.1	

To determine the double, triple and quadruple-length cartridge flow rates or surface areas, multiply the single-length result by 2, 3 or 4 respectively.

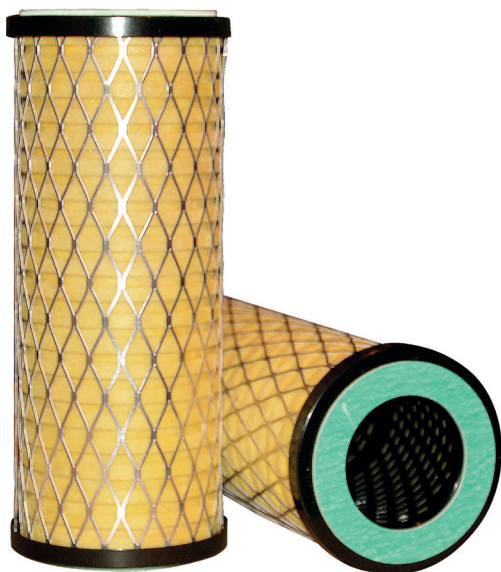
MPM SERIES FLOW RATES

Model		MPM0.5		MPM2	
Micron		0.5		2	
Viscosity		Flow	ΔP	Flow	ΔP
ssu	cs	gpm	psi	gpm	psi
29	1	66	1.4	66	.73
32	2	47	2.0	66	1.4
36	3	31	2.0	60	2.0
43	5	19	2.0	36	2.0
52	8	12	2.0	23	2.0
58	10	9	2.0	18	2.0
98	20	5	2.0	9	2.0
140	30	3	2.0	6	2.0
190	40	2	2.0	5	2.0
230	50	2	2.0	4	2.0
342	75	1	2.0	2	2.0
455	100	0.9	2.0	2	2.0
910	200	0.5	2.0	0.9	2.0
1365	300	0.3	2.0	0.6	2.0
1818	400	0.2	2.0	0.4	2.0
2273	500	0.2	2.0	0.3	2.0

Flow rates are expressed in US Gallons per Minute (GPM).
GPM x 3.785 = Liters per Minute (LPM)

Differential pressure is listed in Pound per Square Inch (PSI).
PSI x .07 = Kilograms per Centimeter Squared (kg/cm²).

MG Series Glass Fiber Filter Cartridges



Facet's Model MG glass fiber depth filter cartridges are for removing colloidal, slimy or sludge type solids 10 micron and larger or where compatibility problems exist with cellulose media.

Our pleated paper filter media is made from a variety of natural and synthetic fibers. The fibers are bonded using various resins to provide excellent filtration and solids holding characteristics.

The cartridges are 6" (152 mm) OD, 3 1/2" (89 mm) ID and 14 1/2" (368 mm) long.

Standard Design Features

- Maximum recommended operating temperature: 300°F (148°C)
- Maximum differential pressure: 75 psi (5.25 kg/cm²)
- Flow direction: Outside to in
- pH range from 1 to 9

Materials

- All metal components coated to protect against corrosion on model MG10
- All metal components stainless steel on model MG10S
- Gaskets are CAF (non-asbestos)
- Metal outer wrap

Housing Selection

- Model 1MCM housings -non-code design for low flow rates
- SuperFlex™ AA housings -ASME Code design for high flow rates
- Model M housings -ASME Code design for high flow rates
- Model HF Housings

Model		MG10		MG10S	
Micron		10		10	
Viscosity		Flow	ΔP	Flow	ΔP
ssu	cs	gpm	psi	gpm	psi
29	1	75	.45	75	.45
32	2	75	1.0	75	1.0
36	3	75	1.4	75	1.4
43	5	68	2.0	75	2.0
52	8	42	2.0	42	2.0
58	10	34	2.0	34	2.0
98	20	17	2.0	17	2.0
140	30	11.3	2.0	11.3	2.0
190	40	8.5	2.0	8.5	2.0
230	50	6.8	2.0	6.8	2.0
342	75	4.5	2.0	4.5	2.0
455	100	3.4	2.0	3.4	2.0
910	200	1.7	2.0	1.7	2.0
1365	300	1.1	2.0	1.1	2.0
1818	400	.85	2.0	.85	2.0
2273	500	.68	2.0	.68	2.0

BS Series Basket Strainers



BS Series filter housings use a Facet's stainless steel high efficiency basket strainer. A single pass of product through the system removes solids such as rust, dirt, scale, granules and other particles commonly found in liquid process streams.

Facet BS Series filter housings are available in several standard sizes to accommodate specific flow and filtration requirements. They are designed with no internal moving parts to provide easy service and reduced maintenance costs. Each housing is manufactured using quality materials and workmanship to give long-lasting, dependable service.

These housings are fitted with a cleanable basket made of stainless steel perforated plate with stainless steel mesh.

Standard Design Features

- Body: Welded carbon steel construction, other materials available on request
- ASME Code, Section VIII construction, stamped and certified or "CE" marked
- Designed for 150 psi (10.5 kg/cm²) at 240°F (115°C); higher pressure and temperature ratings available on request
- Head closures: swing bolt closure
- Head gasket: Buna-N O-ring, other materials available on request
- Inlet and outlet permanently marked
- Exterior: Primer coated
- Interior: Epoxy coated
- Headlift furnished on 20" (508 mm) and larger

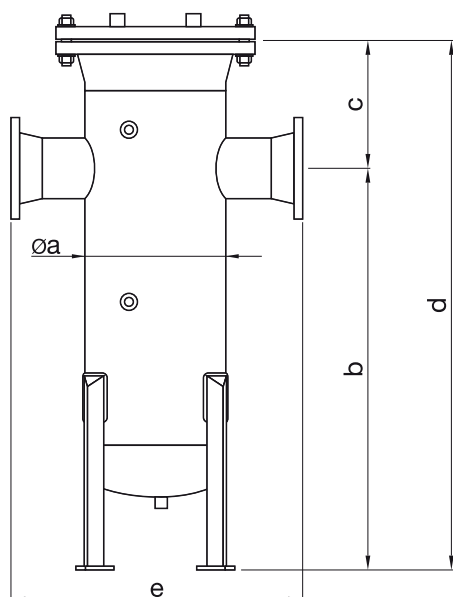
Standard Connections

- Inlet and outlet: 150# RF (ANSI) flanged
- Side and bottom drain: 3000# NPT
- Vent and relief valve: 3/4" 3000# NPT
- Pressure gauge: 3/4" 3000# NPT

Options

- Air eliminator
- Differential pressure gauge
- Pressure relief valve
- Manual drain valve
- Stainless steel wedge wire basket
- Thru bolts closure

BS Series Basket Strainers



DATA

MODEL NUMBER	Øa		b		c		d		e	
	in	mm	in	mm	in	mm	in	mm	in	mm
BS-2	5½	140	11 ¹³ / ₁₆	300	5½	140	17¼	438	9¾	248
BS-3	6 ⁵ / ₈	168	16 ¹¹ / ₃₂	415	6 ¹³ / ₁₆	175	23¼	590	16¾	425
BS-4	8 ⁵ / ₈	219	26¾	680	9½	241	36	914	20	508
BS-6	10¾	273	41 ¹¹ / ₃₂	1050	10½	270	52	1320	22¾	580
BS-8	12¾	324	44 ⁷ / ₈	1140	13	330	57¾	1467	27	686
BS-10	14	356	51 ¹ / ₅	1300	13¾	350	65	1651	28¼	720
BS-12	18	458	49¾	1251	15¼	389	64½	1638	33¼	845
BS-14	18	458	63	1620	150¾	400	79½	2020	34¼	870
BS-16	20	508	71½	1816	19¾	501	91	2311	36	914
BS-20	24	610	74¾	1899	23½	598	98½	2502	41¼	1060
BS-24	28	711	110¼	2800	31½	800	141¾	3600	48	1220

Other sizes available on request.



144 Intracoastal Dr.
Houma, LA 70363
Toll Free: (866) 218-0013
Phone: (985) 346-0122
Fax: (985) 346-0244
www.separatorequipment.com
info@separatorequipment.com